

SEQUENCE LISTING

<110> University of Florida Research Foundation, Inc.
Klee, Harry J.
Tieman, Denise

<120> Materials and Methods for Synthesis of a Flavor and Aroma
Volatile in Plants

<130> UF-386CXC1

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<170> PatentIn version 3.2

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<213> Lycopersicon esculentum

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 Arg Arg Trp Gln Leu Ser Cys Val Lys Asp Met Ala His Val Ile Val
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Val	Gly	Leu	Gln	Lys	Asp	Val	Lys	Arg	Cys	Leu	Asp	Asn	Ala	Lys	Tyr		355	360	365
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 Arg Arg Trp Gln Leu Ser Cys Val Lys Asp Met Ala His Val Ile Val
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 Met Pro Gly Ile Thr Arg Glu Met Leu Asp Asn Phe Thr Ser Glu Leu
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          20          25          30

Thr Val Lys Ala Ser Val Arg Asp Pro Asn Asp Pro Lys Lys Thr Gln
          35          40          45

His Leu Ile Ser Leu Gly Gly Ala Lys Glu Arg Leu His Leu Phe Lys
50          55          60

Ala Asn Leu Leu Glu Glu Gly Ser Phe Asp Ala Val Val Asp Gly Cys
65          70          75          80

Glu Gly Val Phe His Thr Ala Ser Pro Phe Tyr Tyr Ser Val Thr Asp
          85          90          95

Pro Gln Ala Glu Leu Leu Asp Pro Ala Val Lys Gly Thr Leu Asn Leu
          100          105          110

Leu Gly Ser Cys Ala Lys Ala Pro Ser Val Lys Arg Val Val Leu Thr
          115          120          125

Ser Ser Ile Ala Ala Val Ala Tyr Ser Gly Glu Pro Arg Thr Pro Glu
          130          135          140

Val Val Val Asp Glu Ser Trp Trp Thr Ser Pro Asp Tyr Cys Arg Glu
145          150          155          160

Lys Gln Leu Trp Tyr Val Leu Ser Lys Thr Leu Ala Glu Asp Ala Ala
          165          170          175

Trp Lys Phe Val Lys Glu Lys Gly Ile Asp Met Val Ala Ile Asn Pro
          180          185          190

Ala Met Val Ile Gly Pro Leu Leu Gln Pro Thr Leu Asn Thr Ser Ser
          195          200          205

Ala Ala Val Leu Asn Leu Val Asn Gly Ala Glu Thr Tyr Pro Asn Ala
          210          215          220

Thr Phe Gly Trp Val Asn Val Lys Asp Val Ala Asn Ala His Ile Leu
225          230          235          240

Ala Phe Glu Asn Pro Ser Ala Asn Gly Arg Tyr Leu Met Val Glu Arg
          245          250          255

Val Ala His Tyr Ser Asp Ile Leu Lys Ile Leu Arg Glu Leu Tyr Pro
          260          265          270

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Thr	Met	Arg	Leu	Pro	Glu	Lys	Cys	Ala	Asp	Asp	Asn	Pro	Leu	Met	Gln
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Asn	Tyr	Gln	Val	Ser	Lys	Glu	Arg	Ala	Lys	Ser	Leu	Gly	Val	Glu	Phe
	290					295					300				
Thr	Pro	Leu	Glu	Glu	Ser	Ile	Lys	Glu	Thr	Val	Glu	Ser	Leu	Lys	Glu
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Lys	Lys	Phe	Phe	Gly	Gly	Ser	Ser	Ala	Met						
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			20					25					30		
Leu	Phe	Pro	Asn	Val	Asp	Asn	Lys	Lys	Gln	Lys	Val	Glu	Gln	Ser	Gly
			35				40					45			
Ala	Gly	Pro	Arg	Lys	Asn	Leu	Gln	Leu	Glu	Val	Met	Glu	Pro	Ser	Leu
	50					55					60				
Asn	Asn	Asn	Gly	Pro	Ser	Leu	Asp	Thr	Ile	Leu	Val	Asn	Tyr	Leu	Asp
65					70					75					80
Thr	Leu	Thr	Gln	Arg	Val	Asn	Tyr	His	Leu	Gly	Tyr	Pro	Val	Asn	Ile
				85					90					95	
Cys	Tyr	Asp	His	Tyr	Ala	Ser	Leu	Ala	Pro	Leu	Leu	Gln	Phe	His	Leu
			100					105					110		
Asn	Asn	Cys	Gly	Asp	Pro	Phe	Leu	Gln	Asn	Thr	Val	Asp	Phe	His	Ser
		115					120					125			
Lys	Asp	Phe	Glu	Val	Ala	Val	Leu	Asp	Trp	Phe	Ala	Lys	Leu	Trp	Glu
	130						135				140				
Ile	Glu	Lys	Asp	Gln	Tyr	Trp	Gly	Tyr	Val	Thr	Asn	Gly	Gly	Thr	Glu
145					150					155					160
Gly	Asn	Leu	His	Gly	Ile	Leu	Leu	Gly	Arg	Glu	Leu	Leu	Pro	Glu	Gly
				165					170					175	
Ile	Leu	Tyr	Ala	Ser	Lys	Asp	Ser	His	Tyr	Ser	Val	Phe	Lys	Ala	Ala
			180					185					190		
Arg	Met	Tyr	Arg	Met	Asp	Ser	Glu	Thr	Ile	Asn	Thr	Ser	Val	Thr	Gly
		195					200					205			
Glu	Met	Asp	Tyr	Ser	Asp	Leu	Arg	Ala	Lys	Leu	Leu	Gln	Asn	Lys	Asp
	210					215					220				

Lys Pro Ala Ile Ile Asn Val Thr Ile Gly Thr Thr Phe Lys Gly Ala
 225 230 235 240
 Ile Asp Asp Leu Asp Val Ile Leu Glu Thr Leu Lys Glu Cys Gly Tyr
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 Ser Gln Asp Arg Phe Tyr Ile His Cys Asp Ala Ala Leu Cys Gly Leu
 260 265 270
 Met Thr Pro Phe Ile Asn Asn Met Ile Ser Phe Lys Lys Pro Ile Gly
 275 280 285
 Ser Val Thr Ile Ser Gly His Lys Phe Leu Gly Cys Pro Met Pro Cys
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 Gly Val Gln Ile Thr Arg Lys Ser Tyr Ile Asn Asn Leu Ser Thr Asn
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 Val Glu Tyr Ile Ala Ser Val Asp Ala Thr Ile Ser Gly Ser Arg Asn
 325 330 335
 Gly Leu Thr Pro Ile Phe Leu Trp Tyr Ser Leu Ser Ala Lys Gly Gln
 340 345 350
 Val Gly Leu Gln Lys Asp Val Lys Arg Cys Leu Asp Asn Ala Lys Tyr
 355 360 365
 Leu Lys Asn Arg Leu Gln Gln Ala Gly Ile Ser Val Met Leu Asn Glu
 370 375 380
 Leu Ser Ile Ile Val Val Leu Glu Arg Pro Arg Asp His Glu Phe Val
 385 390 395 400
 Arg Arg Trp Gln Leu Ser Cys Val Lys Asp Met Ala His Val Ile Val
 405 410 415
 Met Pro Gly Ile Thr Arg Glu Met Leu Asp Asn Phe Val Ser Glu Leu
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 Val Gln Gln Arg Lys Gln Trp Tyr Arg Asp Gly Lys Ala Glu Ala Pro
 435 440 445
 Cys Val Gly Glu Asp Ile Gly Ala Gln Asn Cys Ala Cys Ser Tyr His
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 Lys Ile Asp Tyr Ile Gly Pro
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